THE IMPACT OF IMMUNIZATION

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Objectives :

- The Importance of Immunization
- Outline the types of vaccines
- Explain the Mechanism of vaccine action
- Mention the factors that influnce immune response (related to vaccine)
- Outline the Side Effects

INTRODUCTION

THE SMALLPOX VACCINE

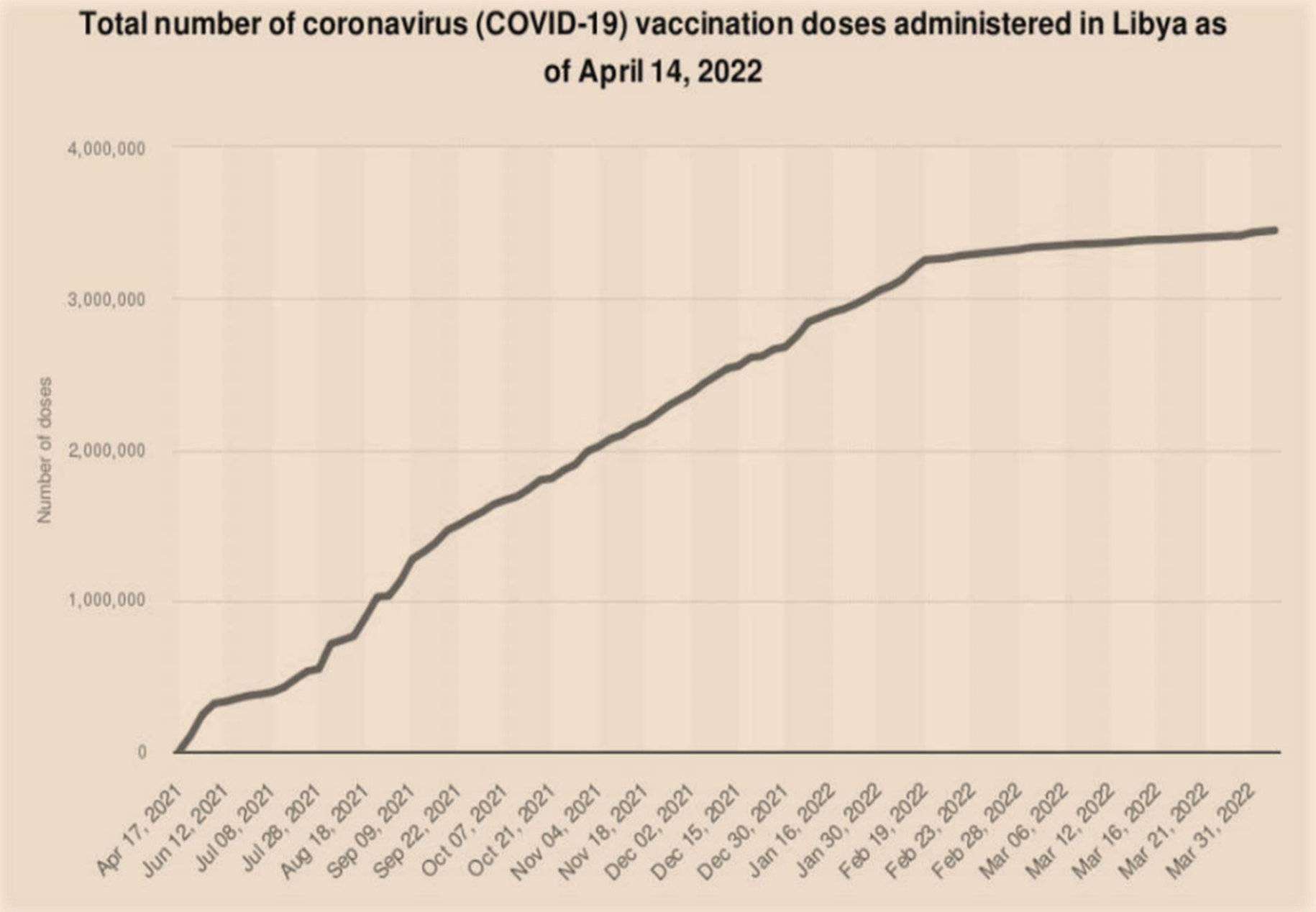
First vaccine was introduced In 1796 By British physician Edward Jenner

THE IMPORTANCE OF IMMUNIZATION

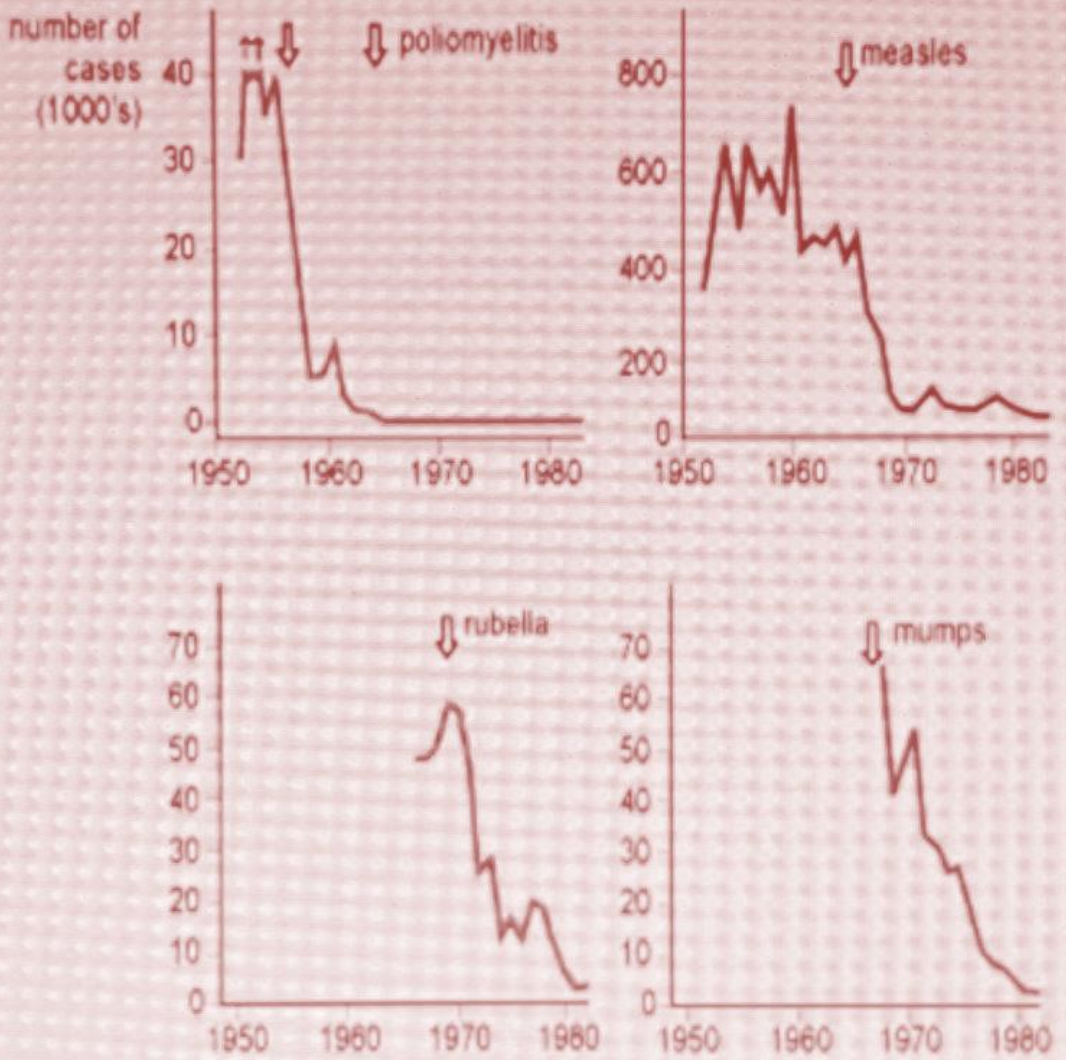
- Immunization can help us prevent and respond to future infectious diseases
- Key component of improving health and well being for everyone and everywhere

Continue ...
Immunization vs Vaccination

- Immunization : Becoming immune to a specific infection or disease, typically through vaccination .
- Vaccination : The act of getting a vaccine to produce immunity to a specific infection or disease .


Total number of coronavirus (COVID-19) vaccination doses administered in Libya as of April 14, 2022
Number of doses
4,000,000
3,000,000
2,000,000
1,000,000
0
Apr 17, 2021
Jun 12, 2021
Jul 08, 2021
Jul 28, 2021
Aug 18, 2021
Sep 09, 2021
Sep 22, 2021
Oct 07, 2021
Oct 21, 2021
Nov 04, 2021
Nov 18, 2021
Dec 02, 2021
Dec 15, 2021
Dec 30, 2021
Jan 16, 2022
Jan 30, 2022
Feb 19, 2022
Feb 23, 2022
Feb 28, 2022
Mar 06, 2022
Mar 12, 2022
Mar 16, 2022
Mar 21, 2022
Mar 31, 2022

INCIDENCE OF FOUR VIRAL DISEASES 1950 – 1980



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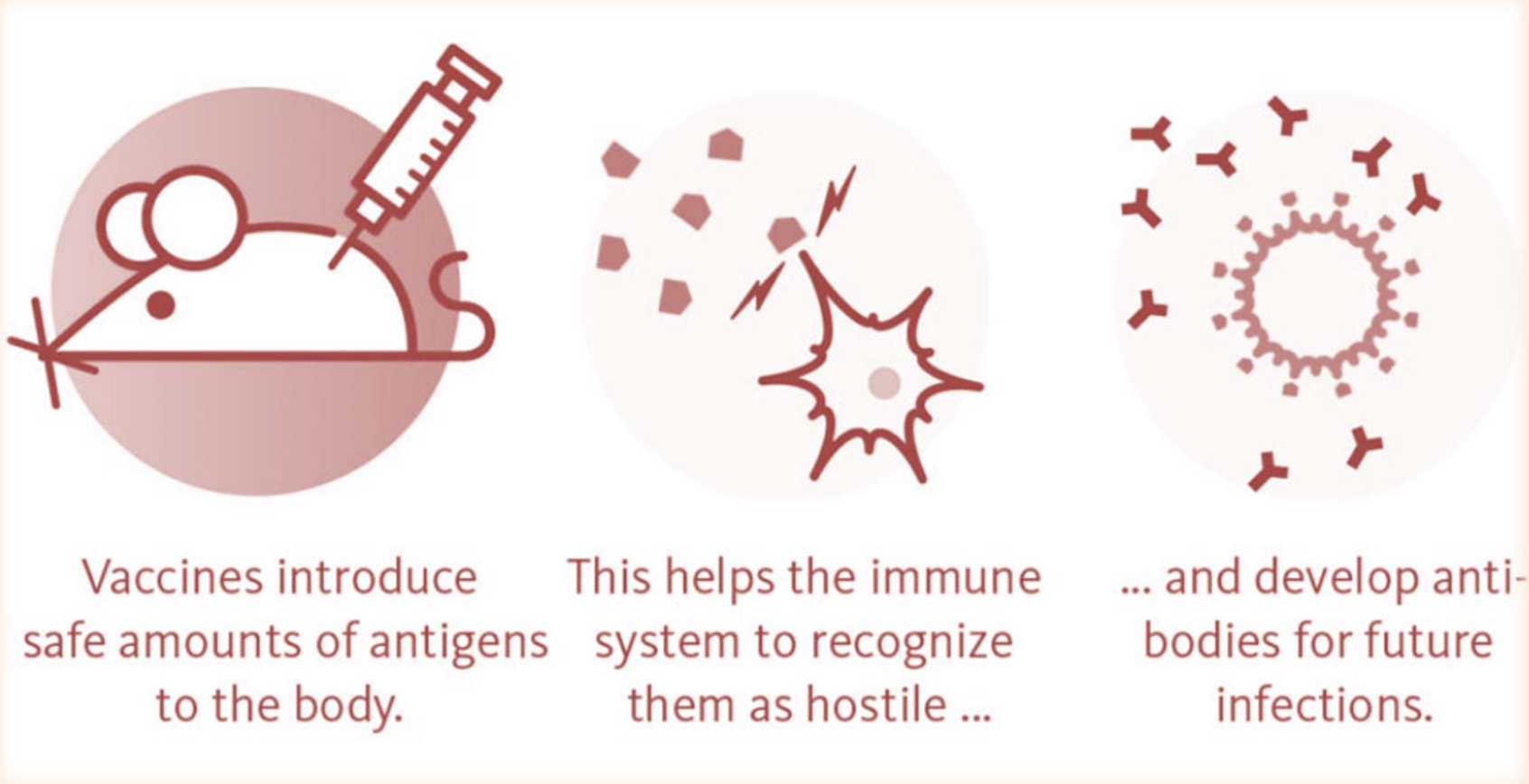
TYPES OF VACCINES

- Live attenuated
- Whole killed
- Subunit
- Recombinant
- Polysaccharide
- Toxoid
- Future vaccines : DNA

What makes the vaccines very important for our immunity

Mechanism of Action



FACTORS THAT INFLUNCE IMMUNE RESPONSE

- The nature of antigens
- The use of Adjuvants
- Vaccine dose
- Vaccination schedule
- Vaccination site

ALL Vaccination may cause normal side effects

- **Including :**

1. Mild fever that doesn't last long <38.5 c
2. Where the needle was given : sore, red burning, itching or small swelling for 1-2 days
3. unsettled mood, unhappy and sleepy
4. Muscle pain
5. chills

*NO LONG TERM HARM TO HEALTH

Conclusion…

- Vaccines are safe,necessary and are studied
- Before you become an anti-vaccine parent, think about who could be harming and who you might spread the deadly belief to.

If we stop vaccination, diseases will return.

Even with better hygiene, sanitation and access to safe water, infections still spread. When people are not vaccinated, infectious diseases that have become uncommon – diphtheria, measles, mumps and polio – quickly reappear.

World Health Organization

Apollo 24|7

Some vaccines recommended by the WHO include:

VACCINE	AGE AT 1ST DOSE
BCG (to protect against tuberculosis)	As soon as possible after birth
Hepatitis B	As soon as possible after birth
Polio	6 weeks
DTP	6 weeks
Typhoid	> 6 months
Measles	9 or 12 months

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Thank You!